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IMAGES IN CARDIOLOGY

From Headache to Heartache

Ergotamine-Induced Aortic and Mitral Valvulopathy

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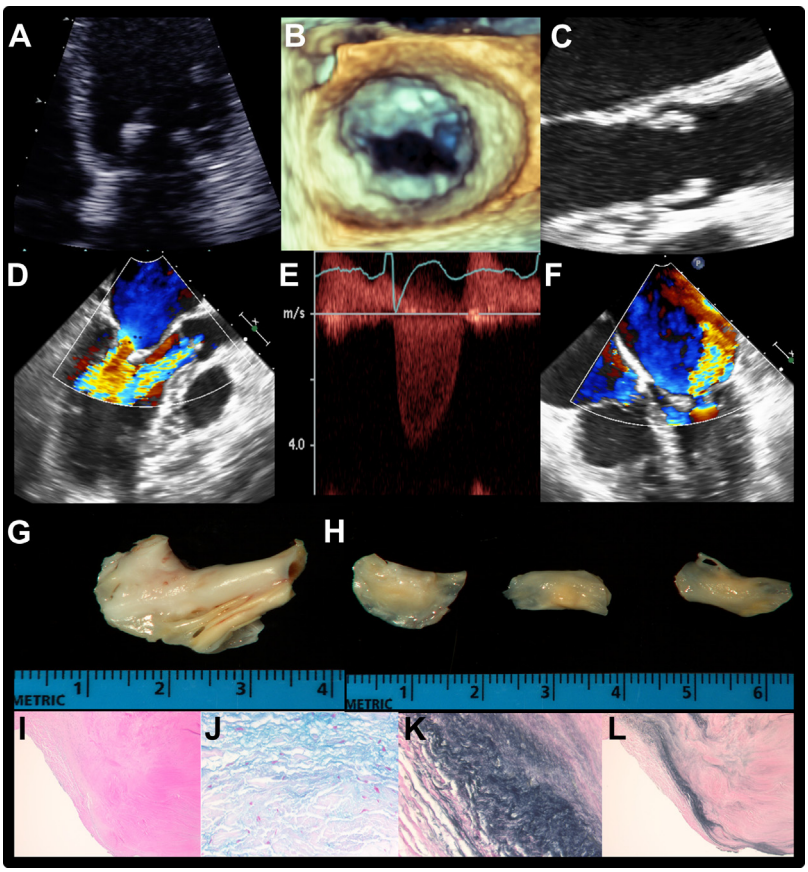

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A 47-year-old female with a 10-year history of severe migraines and extensive use of ergotamine presented with signs and symptoms of decompensated heart failure. No history of rheumatic fever or childhood illness could be elicited. Transthoracic and follow-up transesophageal echocardiogram revealed thickened leaflets of both mitral (**A and B**, Online Video 1) and aortic **(C)** valves with restricted mobility and cusps doming, causing moderate mitral stenosis **(D)** and severe mitral **(E and F)** and aortic **(D)** regurgitation (**C and D**, Online Video 2). Severe pulmonary hypertension was noted, but there was no visible patent foramen ovale. She underwent uneventful mechanical aortic and mitral valve replacement, and coronary artery bypass grafting for significant left main stenosis. Pathological analysis of her mitral **(G)** and aortic **(H)** valvular specimens revealed tan-white, thickened tissue without calcification that was histopathologically characterized by fibrotic nodules **(I)** containing mucoid substance (Alcian-blue stain, **J**) with surrounding elastic fibers (Elastin-van Gieson stain, **K and L**). Findings were consistent with ergotamine-induced valvulopathy. Echocardiographic surveillance should be considered in those requiring long-term use of ergotamine and/or dopamine agonists.